

Amendments to the Claims:

Please substitute the following amended claims 210-216, 218-220, 222-226 and 228, for those previously appearing in this case:

210 (Currently Amended). A therapeutic composition, comprising:

a pharmaceutical formulation comprising

(1) a pharmaceutically acceptable carrier and

(2) (a) a genetically-engineered antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or

(b) a fragment of the genetically-engineered antibody of (a) that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33,

wherein said genetically-engineered antibody is obtained by genetically engineering the DNA encoding a monoclonal antibody that

(i) binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and

(ii) is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of beta-amyloid; and

wherein said antibody or fragment is not conjugated with a detectable moiety.

211 (Currently Amended). The therapeutic composition of claim 210, wherein said genetically-engineered antibody of (2) (a) binds human beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or said fragment of (2) (b) binds human beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and said genetically-engineered antibody of (2) (a) is obtained by genetically engineering the DNA encoding a monoclonal antibody that binds human beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33 and said monoclonal antibody is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of human beta-amyloid.

212 (Currently Amended). A therapeutic composition, comprising:

a pharmaceutical formulation comprising
(1) a pharmaceutically acceptable carrier and
(2) (a) a human monoclonal antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains

the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or

(b) a fragment of the human monoclonal antibody of (a) that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33,

wherein said human monoclonal antibody is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of beta-amyloid.

213 (Currently amended). The therapeutic composition of claim 212, wherein said human monoclonal antibody of (2)(a) binds beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or said fragment of (2)(b) binds beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and wherein said human monoclonal antibody of (a) is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of human beta-amyloid.

214 (Currently Amended). A method of making a therapeutic composition comprising (1) a pharmaceutically acceptable carrier and (2)(a) a genetically-engineered antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-

amyloid to an extent at least as great as that obtainable with antibody AMY-33, or (b) a fragment of the genetically-engineered antibody of (a), which fragment binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, said method comprising:

selecting a monoclonal antibody that

(i) binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and

(ii) is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of beta-amyloid;

genetically engineering the DNA encoding said selected monoclonal antibody so as to produce a genetically-engineered antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or a fragment of a genetically engineered antibody, which fragment binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33; and

formulating said genetically engineered monoclonal antibody or fragment with a pharmaceutical carrier into a pharmaceutical formulation that is a therapeutic composition.

215 (Currently Amended). A therapeutic composition, comprising:

a pharmaceutical formulation comprising

(1) a pharmaceutically acceptable carrier and

(2) (a) a genetically-engineered antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or

(b) a fragment of the genetically-engineered antibody of (a) that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33,

wherein said genetically-engineered antibody is obtained by genetically engineering the DNA encoding a monoclonal antibody that

(i) binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and

(ii) recognizes an epitope within residues 1-28 of beta-amyloid, and

wherein said antibody or fragment is not conjugated with a detectable moiety.

216 (Currently Amended). The therapeutic composition of claim 215, wherein said genetically-engineered antibody of (2)(a) binds beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or said fragment of (2)(b) binds beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, and said genetically-engineered antibody of (2)(a) is obtained by genetically engineering the DNA encoding a monoclonal antibody that binds beta-amyloid and inhibits aggregation of human beta-amyloid or maintains the solubility of soluble human beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33 and said monoclonal antibody recognizes an epitope within residues 1-28 of human beta-amyloid.

218 (Currently Amended). A method of making a therapeutic composition comprising (1) a pharmaceutically acceptable carrier and (2)(a) a genetically-engineered antibody that binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as great as that obtainable with antibody AMY-33, or (b) a fragment of the genetically-engineered antibody of (a), which fragment binds beta-amyloid and inhibits aggregation of beta-amyloid or maintains the solubility of soluble beta-amyloid to an extent at least as

great as that obtainable with antibody AMY-33, said method comprising:

selecting a monoclonal antibody that
(i) binds beta-amyloid and inhibits aggregation
of beta-amyloid or maintains the solubility of soluble beta-
amyloid to an extent at least as great as that obtainable with
antibody AMY-33, and
(ii) recognizes an epitope within residues 1-28
of beta-amyloid;

genetically engineering the DNA encoding said
selected monoclonal antibody so as to produce a genetically-
engineered antibody that binds beta-amyloid and inhibits
aggregation of beta-amyloid or maintains the solubility of
soluble beta-amyloid to an extent at least as great as that
obtainable with antibody AMY-33, or a fragment of a
genetically engineered antibody, which fragment binds beta-
amyloid and inhibits aggregation of beta-amyloid or maintains
the solubility of soluble beta-amyloid to an extent at least
as great as that obtainable with antibody AMY-33; and

formulating said genetically engineered monoclonal
antibody or fragment with a pharmaceutical carrier into a
pharmaceutical formulation that is a therapeutic composition.

219 (Currently Amended). A therapeutic composition,
comprising:

a pharmaceutical formulation comprising
(1) a pharmaceutically acceptable carrier and

(2) (a) a genetically-engineered antibody that binds
beta-amyloid and disaggregates an aggregate of β -amyloid, or

(b) a fragment of the genetically-engineered
antibody of (a) that binds beta-amyloid and disaggregates an
aggregate of β -amyloid,

wherein said genetically-engineered antibody is
obtained by genetically engineering the DNA encoding a
monoclonal antibody that

(i) binds beta-amyloid and disaggregates an
aggregate of β -amyloid and

(ii) is obtainable using an immunogen consisting of
a peptide consisting of residues 1-28 of beta-amyloid, and

wherein said antibody or fragment is not conjugated
with a detectable moiety.

220 (Currently Amended). The therapeutic
composition of claim 219, wherein said genetically-engineered
antibody of (2) (a) binds beta-amyloid and disaggregates an
aggregate of human β -amyloid, or said fragment of (2) (b) binds
beta-amyloid and disaggregates an aggregate of human β -
amyloid, and said genetically-engineered antibody of (2) (a) is
obtained by genetically engineering the DNA encoding a
monoclonal antibody that binds beta-amyloid and disaggregates
an aggregate of human β -amyloid and said monoclonal antibody
is obtainable using an immunogen consisting of a peptide
consisting of residues 1-28 of human beta-amyloid.

222 (Currently Amended). A therapeutic composition,
comprising:

a pharmaceutical formulation comprising
(1) a pharmaceutically acceptable carrier and
(2) (a) a human monoclonal antibody that binds beta-
amyloid and disaggregates an aggregate of β -amyloid, or
(b) a fragment of the human monoclonal antibody
of (a) that binds beta-amyloid and disaggregates an aggregate
of β -amyloid,
wherein said human monoclonal antibody is obtainable
using an immunogen consisting of a peptide consisting of
residues 1-28 of beta-amyloid.

223 (Currently Amended). The therapeutic
composition of claim 222, wherein said human monoclonal
antibody of (2) (a) binds beta-amyloid and disaggregates an
aggregate of human β -amyloid, or said fragment of (2) (b) binds
beta-amyloid and disaggregates an aggregate of human β -
amyloid, and wherein said human monoclonal antibody of (a) is
obtainable using an immunogen consisting of a peptide
consisting of residues 1-28 of human beta-amyloid.

224 (Currently Amended). A method of making a
therapeutic composition comprising (1) a pharmaceutically
acceptable carrier and (2) (a) a genetically-engineered
antibody that binds beta-amyloid and disaggregates an
aggregate of β -amyloid, or (b) a fragment of the genetically-
engineered antibody of (a), which fragment binds beta-amyloid
and disaggregates an aggregate of β -amyloid, said method
comprising:

selecting a monoclonal antibody that

(i) binds beta-amyloid and disaggregates an aggregate of β -amyloid, and

(ii) is obtainable using an immunogen consisting of a peptide consisting of residues 1-28 of beta-amyloid;

genetically engineering the DNA encoding said selected monoclonal antibody so as to produce a genetically-engineered antibody that binds beta-amyloid and disaggregates an aggregate of β -amyloid, or a fragment of a genetically engineered antibody, which fragment binds beta-amyloid and disaggregates an aggregate of β -amyloid; and

formulating said genetically engineered monoclonal antibody or fragment with a pharmaceutical carrier into a pharmaceutical formulation that is a therapeutic composition.

225 (Currently Amended). A therapeutic composition, comprising:

a pharmaceutical formulation comprising

(1) a pharmaceutically acceptable carrier and

(2) (a) a genetically-engineered antibody that binds beta-amyloid and disaggregates an aggregate of β -amyloid, or

(b) a fragment of the genetically-engineered antibody of (a) that binds beta-amyloid and disaggregates an aggregate of β -amyloid,

wherein said genetically-engineered antibody is obtained by genetically engineering the DNA encoding a monoclonal antibody that

(i) binds beta-amyloid and disaggregates an
aggregate of β -amyloid and

(ii) recognizes an epitope within residues 1-28 of
beta-amyloid, and

wherein said antibody or fragment is not conjugated
with a detectable moiety.

226 (Currently Amended). The therapeutic
composition of claim 225, wherein said genetically-engineered
antibody of (2) (a) binds beta-amyloid and disaggregates an
aggregate of human β -amyloid, or said fragment of (2) (b) binds
beta-amyloid and disaggregates an aggregate of human β -
amyloid, and said genetically-engineered antibody of (2) (a) is
obtained by genetically engineering the DNA encoding a
monoclonal antibody that binds beta-amyloid and disaggregates
an aggregate of human β -amyloid and said monoclonal antibody
recognizes an epitope within residues 1-28 of human beta-
amyloid.

228 (Currently Amended). A method of making a
therapeutic composition comprising (1) a pharmaceutically
acceptable carrier and (2) (a) a genetically-engineered
antibody that binds beta-amyloid and disaggregates an
aggregate of β -amyloid, or (b) a fragment of the genetically-
engineered antibody of (a), which fragment binds beta-amyloid
and disaggregates an aggregate of β -amyloid, said method
comprising:

selecting a monoclonal antibody that

(i) binds beta-amyloid and disaggregates an
aggregate of β -amyloid, and

(ii) recognizes an epitope within residues 1-28
of beta-amyloid;

genetically engineering the DNA encoding said
selected monoclonal antibody so as to produce a genetically-
engineered antibody that binds beta-amyloid and disaggregates
an aggregate of β -amyloid, or a fragment of a genetically
engineered antibody, which fragment binds beta-amyloid and
disaggregates an aggregate of β -amyloid; and

formulating said genetically engineered monoclonal
antibody or fragment with a pharmaceutical carrier into a
pharmaceutical formulation that is a therapeutic composition.